### Amylin hormone, Leptin and other Metabolic hormones in the preterm Babies

#### **Thesis**

Submitted for partial fulfillment of Master Degree in Pediatrics

Submitted By

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### هرمونات الأميلين الليبتين وهرمونات التمثيل الغذائى الخدائى الأخرى عند المواليد الخدج

توطئة للحصول على درجة الماجستير في طب الأطفال

مقدمة من الطبيب/ أحمد محمود الأسود

تحت إشراف

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> كلية الطب جامعة عين شمس ٢٠٠٦

# فِالله الرفين الرفيم

## وما أوتيتم من العلم إلا قليلا

والمالعظيم

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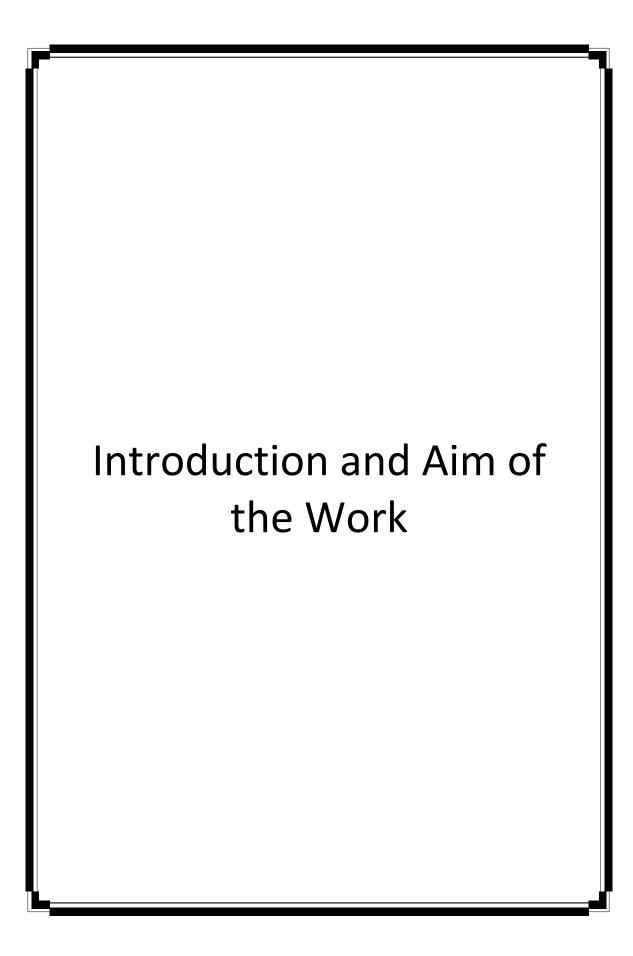
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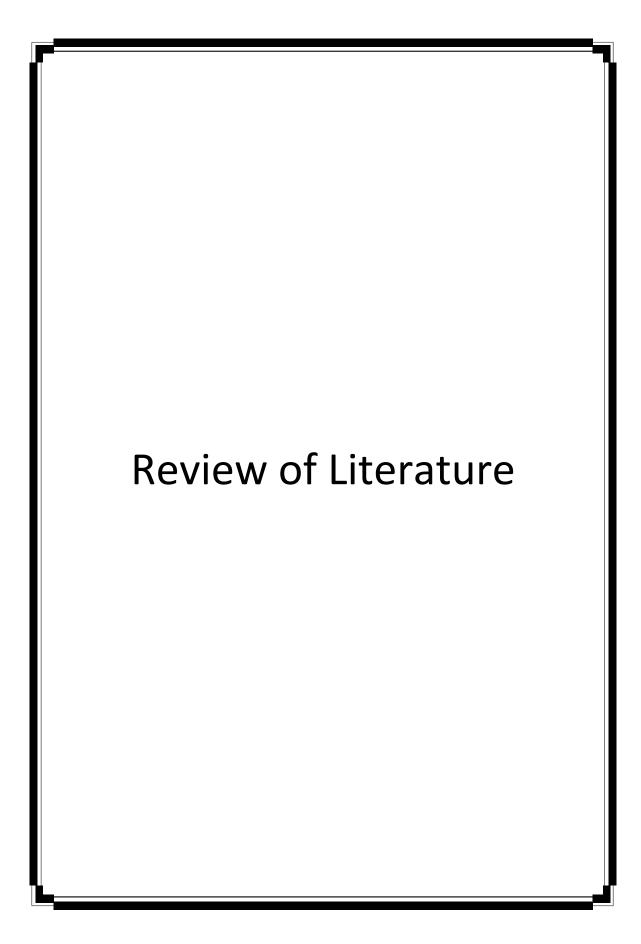
Finally, I would like to thank my family which have supported me during my work and prayed for me in every step.

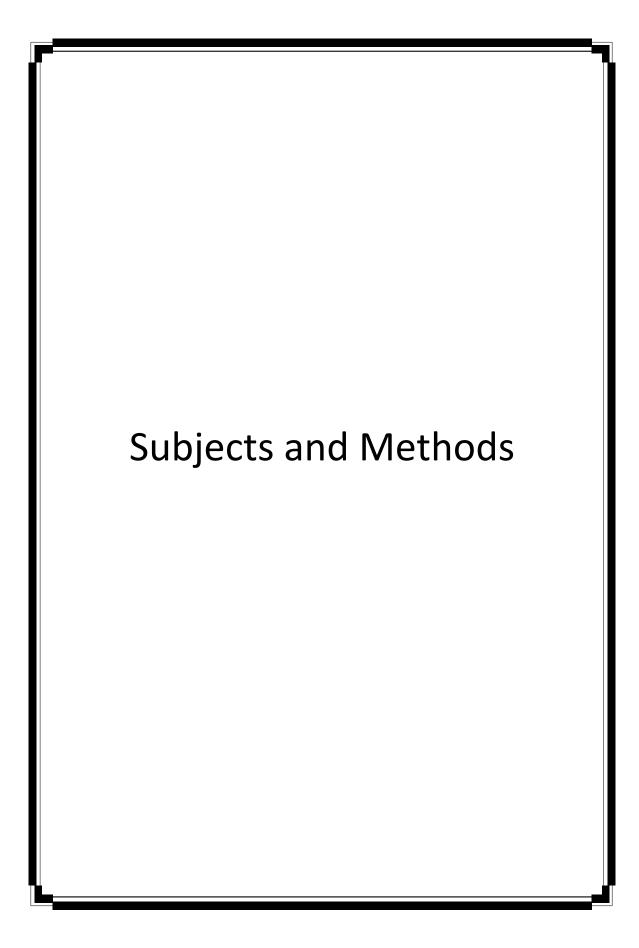
**Ahmed Mohamed Alaswad** 

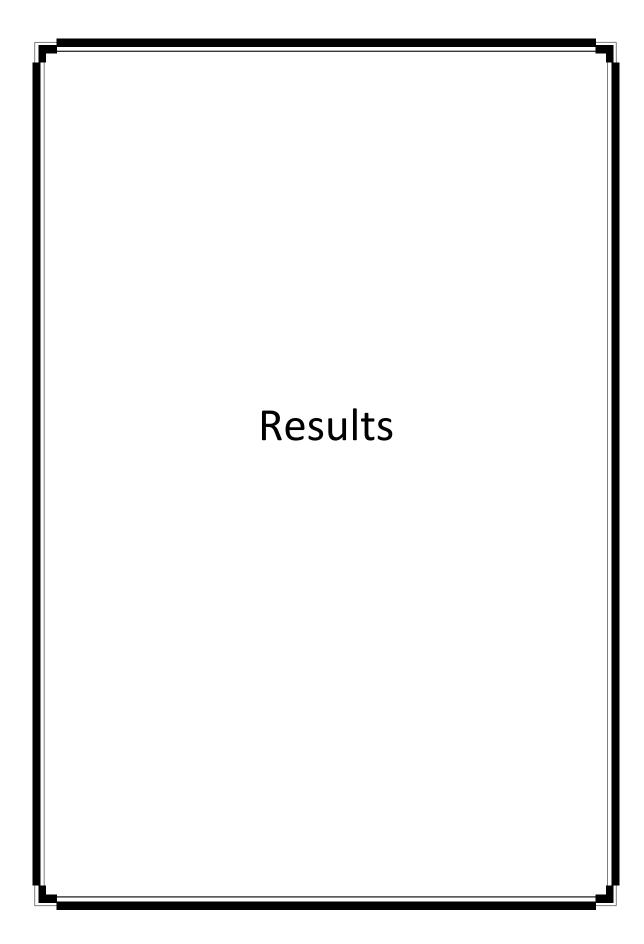
### Aim of the work

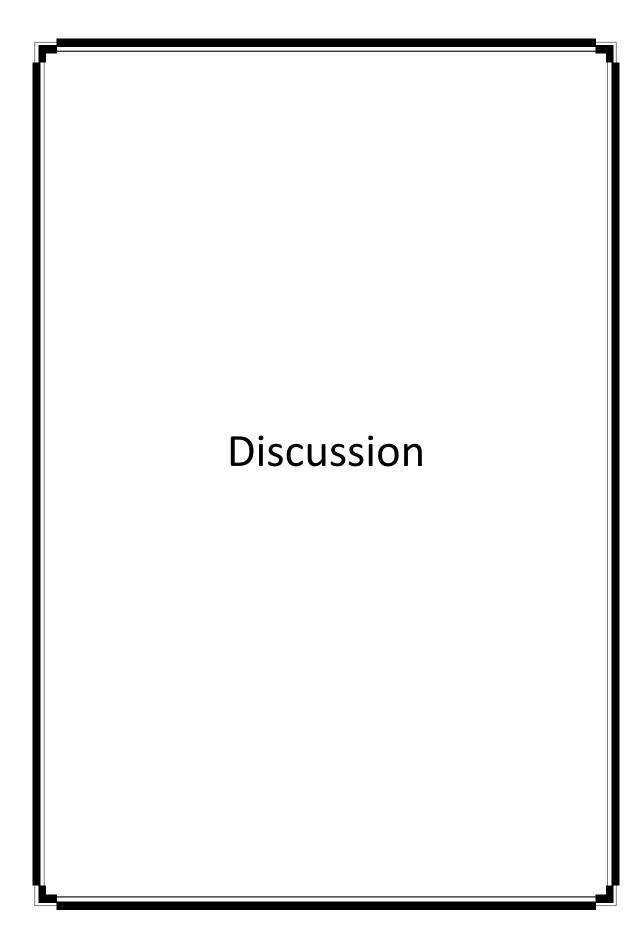
The aim of this work is to determine the levels of amylin, leptin and other metabolic hormones namely cortisol and insulin in preterm neonates to establish the relationship of these hormones with both adipo-insular axis and hypothalamic-adrenal axis compared to full term neonates

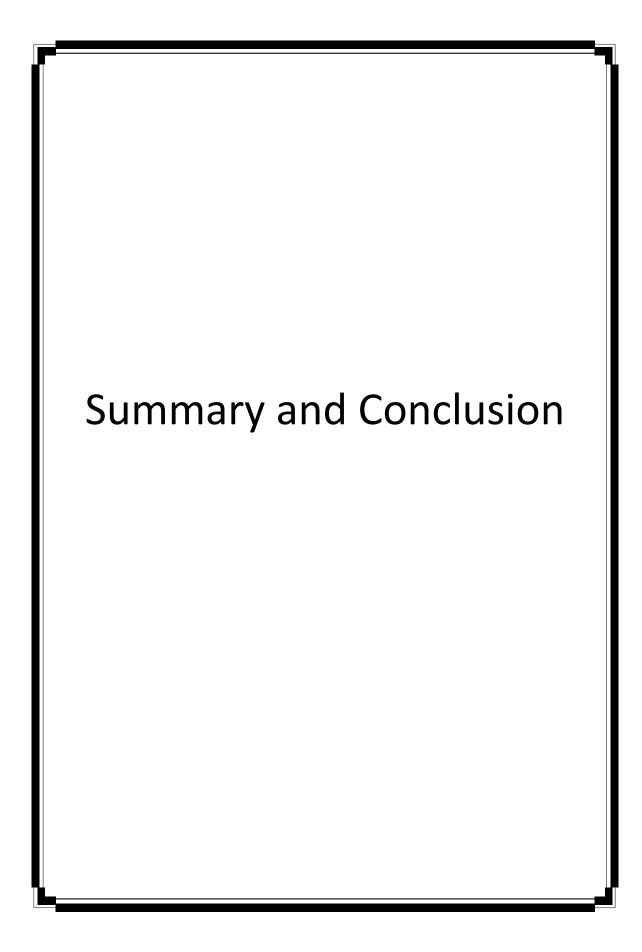




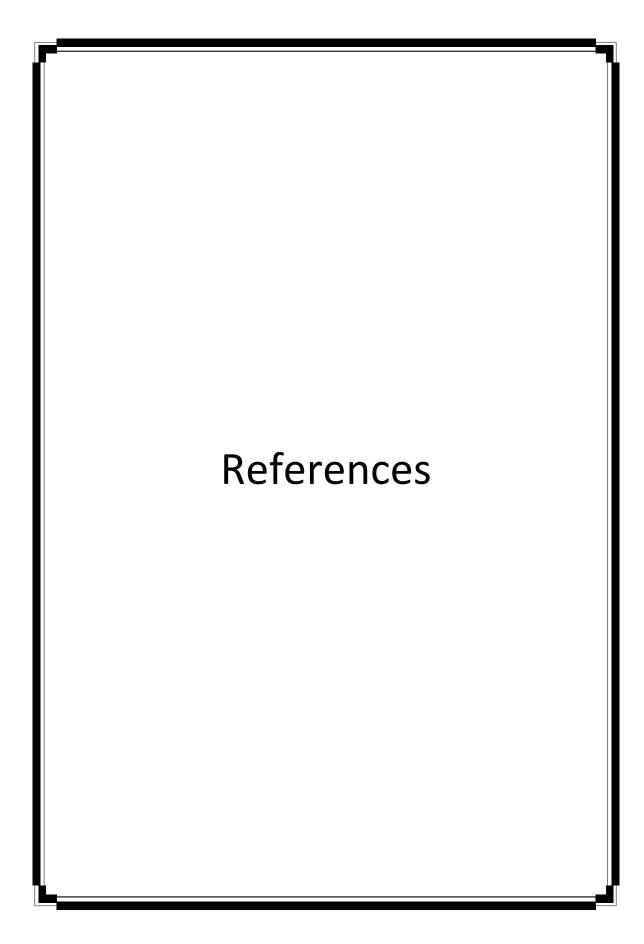


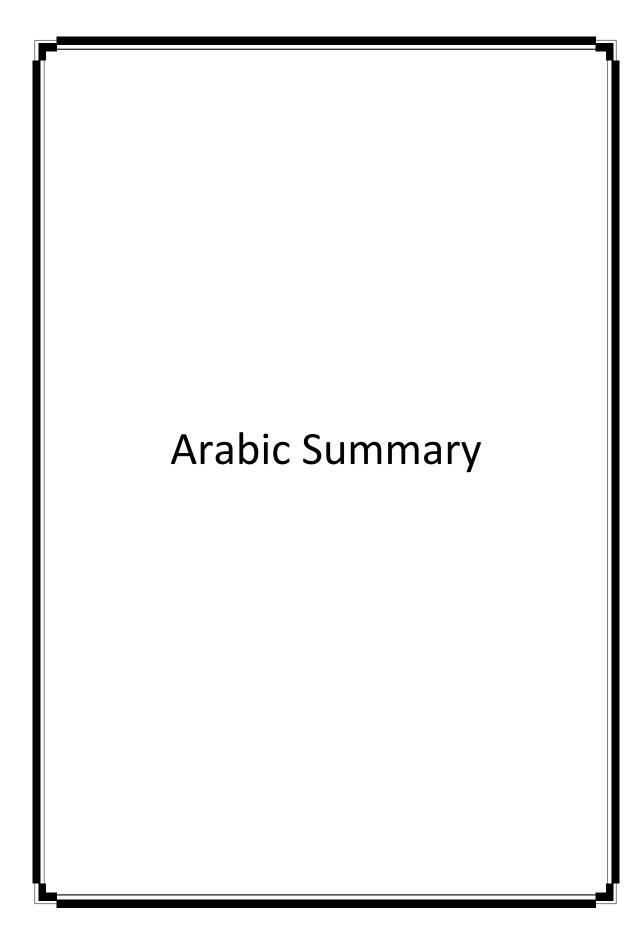












### List of abbreviations

**ACTH** Adreno-corticotrophic hormone

**ALT** Alanine transaminase

**AP** Area Pre-stema

**AST** Asparate transaminase.

**ATP** Adenosine Tri-phosphate

**BBB** Blood Brain Barrier.

**CBC** Complete blood count.

**CBF** Cerebral blood flow.

CBG Corticosteroid binding globulin.CGRP Calcitonin gene-related peptides

**CNS** Central nervous system.

**CRH** Corticotrophine releasing hormone.

**CRLR** Calcitonin receptor-like receptor.

CTR Calcitonin receptor

**GH** Growth Hormone.

**ELISA** Enzyme linked Immunosorbent Assay.

**GIP** Glucose-dependent insulinotropic peptide.

**GLP-1** Glucagon-like peptide-1

**GPDH** Glyceraldehyde phosphate dehydrogenase.

**GPs** Glyceraldehyde phosphates.

**HDL** High Density Lipo-proteins.

**HRP** Horse radish peroxidase.

**IRS** Insulin-receptor substrate

**IUGR** Intra-Uterine growth retardation.

**LGA** Large for gestational age

**M.A.b** Monoclonal antibody

**NEC** Necrotizing enterocolitis.

**NICU** Neonatal Intensive Care Unit.